

Pictures of Plants on the *M. arborea* Project

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INTRODUCTION

Pictures of flower colors, pods, shoots and crowns of key plants follow in Figures 1 through 10. Figure 6 shows how we grow clusters of *M. arborea* in the field. This permits wrapping a canvas around each cluster when hard frosts occur in the fall. Pruning to the central shoot permits keeping more plants in the greenhouse in the winter. Figure 10 illustrates the size and vigor differences of three sac seedlings. We did not anticipate the differences, and had to separate the plants before the small ones suffered from competition. Fortunately, all plants survived.



Fig. 1: *M. sativa* MBms seed parent



Fig. 2: Variegated flower color typical of sac progeny of MBms \times *M. arborea*.



Fig. 3: *M. arborea* flowers typical of plants used in crosses



Fig. 4: Stems of *M. arborea* with roots attached and central stems cut from 4x *M. falcata* (WISFAL) grown in the field for 150 days



Fig. 5: Progeny of sac \times sac with a weakly developed crown



Fig. 6: A cluster of 5 *M. arborea* plants pruned to central shoot, growing in a *M. falcata* nursery on the University of Wisconsin campus at Eagle Heights. These plants are 30 months old.



Fig. 7: sac plt that segregated as simplex at the P locus (P---), here showing loss of the one P allele on one of the first 50 flowers produced in the greenhouse, Nov. 15, 2004



Fig. 8: Pods of MBMs (left) and pod of a sac plant on right showing tissue-specific susceptibility to powdery mildew on the suture of the pod



Fig. 9: Pods of MBms (left) and pods of a sac plant on right showing tissue-specific susceptibility to powdery mildew on the suture of the pod



Fig. 10: Seedlings of different sizes that all eventually showed hybrid traits. Note that the large seedlings had limited contractile growth. The small seedling was thought to be a haploid of MBms until it produced variegated flowers.